

**Atty Docket No.: IDF 1499
(4000-02500)**

Patent

REMARKS

Claims 1-25 are currently pending in this Application. By the office action of 12/7/2005, the Examiner has rejected Claims 1-25 on various grounds discussed below. The Applicant respectfully traverses these rejections. Reconsideration is requested.

Claims 1-25 were rejected under 35 U.S.C. 103(a) as being unpatentable over Wallace US Pat. 6,647,117 in view of Gidwani US Pat. 6,640,239.

Improper rejection:

The Applicant submits that there is no teaching, suggestion or motivation for one skilled in the art to combine the references and that the teachings of the references actually teach away from any such combination. As a result, the ground of rejection is improper, because there is no basis for combining the references.

The rejection is based in part on a number of elements that the Examiner asserts are found in the *Wallace* reference. The Examiner notes that *Wallace* does not show signaling to the user that the AC power has failed. The Examiner fills this missing element with the *Gidwani* reference by asserting that *Gidwani* teaches notifying the subscriber when power failure has occurred. To support the combination of the references, the Examiner asserts that "it would have been obvious to any one of ordinary skill in the art at the time the invention was made to modify the invention of *Wallace* to employ power management at the Customer Premise as taught by *Gidwani* for the benefit of providing subscriber with voice over IP."

Wallace teaches a system for continuing voice over DSL service during power failure at the customer premises. The system includes line terminating equipment, LTE,

*Atty Docket No.: IDF 1499
(4000-02500)*

Patent

at the telephone company central office, CO, as well as customer premises equipment, CPE, located at the customer premises.

Wallace teaches that use of batteries at the CPE is a problem, not a solution. As stated at col. 1, lines 49-57:

"Use of batteries at the CPE to provide backup power in the event of power failure presents other problems: batteries may be bulky and therefore unattractive to subscribers; batteries require periodic maintenance to ensure reliability; and battery faults may not be detected until a local power failure occurs and they fail to provide power to the CPE and hence provide lifeline support, which defeats the object of their presence in the system."

Wallace does not provide batteries or other power backup in the CPE. As stated at col. 2, lines 33-37:

"Advantageously, the system avoids the need to provide battery backed up equipment at the customer premises, and the attendant need to keep the batteries in good condition, and yet, still allows a "lifeline" voice-over-DSL service to be provided in the presence of power loss at the CPE."

Instead, *Wallace* supplies power from the line power feed circuit 314 in the LTE at the CO through the subscriber line 370 to the CPE for operation when normal power at the CPE fails. See col. 4, lines 58-60:

*Atty Docket No.: IDF 1499
(4000-02500)*

Patent

“Line power feed circuit 314 provides for the injection of a DC voltage, for provision of a DSL scaling current, or for remote powering of the CPE during power failure.”

See also col. 7, lines 26-31:

“On detection of loss of power to the customer premises equipment in a voice-over-DSL installation, the CPE switches into a low-power mode, so that it operates from power which is supplied by DC feed down the subscriber line alone, without the need for support from any other external power source.”

While it is generally accepted that DC power feed down the subscriber line normally cannot provide sufficient power to operate this type of CPE, *Wallace* solves this problem by disabling many parts of the CPE and operating only one voice line. Stated otherwise, *Wallace* uses power management to allow continued operation. See Table 1 where *Wallace* shows that CPE power requirements can be reduced from 2.75 W to 0.71 W. *Wallace* teaches that the POTS line DC feed can provide one watt and that a single POTS phone typically consumes 0.25 W. The single phone plus the reduced power of 0.71 W is therefore within the capability of the available power from the LTE at the CO.

Wallace does not provide a backup power system, e.g. batteries, in the CPE and therefore has no reason to conserve power from a backup system. Instead, *Wallace* reduces power consumption in the CPE so that it can operate on power from the LTE at the CO provided over the subscriber line. The system of *Wallace* can operate indefinitely in the lifeline mode without any concern about running down backup

*Atty Docket No.: IDF 1499
(4000-02500)*

Patent

batteries in the CPE. In lifeline mode, the system operates using power just like a POTS system operates. The subscriber has no reason to do anything to conserve power. The system automatically reduces the power requirements so that the system can operate on power from the CO. Therefore, there is no reason, advantage or suggestion for notifying the subscriber of local power failure when the subscriber picks up the phone to make a call.

Gidwani teaches a system that uses only VOIP services. *Gidwani* teaches that such systems use too much power to operate on power supplied from a CO, like POTS systems do. *Gidwani's* system therefore must have some type of power backup to operate when the normal power at the customer premises fails. *Gidwani* teaches numerous methods for conserving power at the customer premises. For example, *Gidwani* teaches turning off data services and limiting service to voice service just like *Wallace*. *Gidwani* teaches various power backup systems and replaceable batteries.

Both *Wallace* and *Gidwani* teach power management in the event of loss of normal power at a customer premises. Since *Wallace* already teaches power management, there is no motivation to add teachings from *Gidwani* for that purpose.

However, the references provide power management for different reasons. *Wallace* has no backup power on the customer premises, and teaches power management at the customer premises to allow use of power received over the subscriber line as is done in POTS service. *Gidwani* teaches power management to conserve available power from a backup power supply at the customer premises. Since

*Atty Docket No.: IDF 1499
(4000-02500)*

Patent

Wallace has no backup power in the CPE and actually teaches that such backup power is a problem, there would be no reason for combining any reference teaching conservation of backup power. Since *Gidwani* teaches that power from the LTE at the CO cannot provide enough power for its CPE, there would be no reason for combining a reference teaching use of power from the LTE at the CO. There is nothing in the references to suggest that they should be combined. The combination is therefore improper.

The 103 rejections:

With respect to independent apparatus claims 10, 14, 18 and 22, the Examiner has asserted that *Wallace* teaches a number of the claimed elements.

The Examiner asserts that *Wallace* teaches a plurality of subscriber line interface circuits, SLICs, equaling the number of telephone lines. A review of *Wallace* indicates that *Wallace* teaches only one R SLIC 361 in the CPE.

The Examiner asserts that *Wallace* teaches at least one subscriber line access circuit, SLAC, connected to the SLICs to detect an off-hook condition in the telephone line. *Wallace* does not actually refer to a subscriber line access circuit or a SLAC. It appears that the analog front end 366, including elements 367, 368, perform some of the functions of a SLAC. *Wallace* however does not indicate that those elements detect an off hook condition. Fig. 1 of *Wallace* does not indicate that the elements 366, 367, 368 are connected to the R SLIC 361.

The Examiner notes that *Wallace* does not show signaling to the user that the AC power has failed. The Examiner asserts that *Gidwani* provides this missing disclosure

*Atty Docket No.: IDF 1499
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Patent

and teaches notifying the subscriber when power at the customer premises has failed. In particular, the Examiner asserts that it would have been obvious "to modify the invention of *Wallace* to employ power management at the Customer Premise as taught by *Gidwani* for the benefit of providing subscriber with voice over IP".

As noted above, there would be no reason to modify the invention of *Wallace* to employ power management at the Customer Premise as taught by *Gidwani* since *Wallace* already teaches a power management, i.e. power reduction, equivalent to the power management of *Gidwani*. In addition, the fact that *Gidwani* teaches power management to conserve batteries, and *Wallace* does not use batteries, teaches away from the suggested combination.

In view of these substantial differences, the Applicant submits that claims 10, 14, 18 and 22, as amended, are allowable over the cited references. Claims 11-13, 15-17, 19-21 and 23-25 should also be allowable since they depend from these claims.

Method claims 1-9 were rejected on the same basis as the apparatus claims discussed above. The Applicant submits that the rejection is improper for the reasons discussed above. As a result, the Applicant submits that claims 1-9 are also allowable over the cited references.

The Commissioner is hereby authorized to charge payment of any further fees associated with any of the foregoing papers submitted herewith, or to credit any overpayment thereof, to Deposit Account No. 21-0765, Sprint.

*Atty Docket No.: IDF 1499
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Patent

Applicants respectfully submit that the present application as amended is in condition for allowance. If the Examiner has any questions or comments or otherwise feels it would be helpful in expediting the application, he is encouraged to telephone the undersigned at (972) 731-2288.

Respectfully submitted,

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